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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on <u>29 April 2008</u>.

2a)☒ This action is **FINAL**.        2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) <u>1-28</u> is/are pending in the application.

     4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-28</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

     a)☒ All   b)☐ Some *  c)☐ None of:

       1.☒ Certified copies of the priority documents have been received.

       2.☐ Certified copies of the priority documents have been received in Application No. _____.

       3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

     * See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☐ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
     Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
     Paper No(s)/Mail Date. _____.

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____.

# DETAILED ACTION

## *Response to Amendment*

1.      Applicant amendment filed on April 29<sup>th</sup>, 2008 has been entered. Claims 1, 3, 6,

8, 11, 13, 19 and 21 have been amended. Claim 28 has been added. Claims 1-28 are

still pending in the application.

## *Claim Rejections - 35 USC § 102*

2.      The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3.      Claims 1, 4-6, 9-11, 13, 17-19, 21, and 25-28 are rejected under 35

U.S.C. 102(e) as being anticipated by Liu et al. (USP 184,421 B1).

Liu et al. discloses a communication system for techniques that use network

topology information to build and maintain a dynamically ad-hoc network with the

following features: regarding claim 1, a system for reliably broadcasting a data packet

under an ad-hoc network environment, the system comprising (Fig. 1, controlled flood

multicast network nodes in ad-hoc network environment, see "ad-hoc network capable

of efficiently routing both multicast and unicast traffic" recited in column 2 lines 59-66); a

comparing unit operable to compare a first relay node sequence number with a second

relay node sequence number, the first relay node sequence number being contained in

a management packet received by at least one node transmitting the data packet , the

second relay node sequence number being stored in a neighbor table of the at least one

node (Fig. 18, technique for forwarding CFM unicast message, see "comparing the

sequence number and node identifier against the stored list" recited in column 29 lines

26-32 and column 14 lines 11-22) and a control unit operable to determine whether or

not the data packet is retransmitted by the at least node according to a result of the

comparison (Fig. 2B, a typical CFM communication node, see " the node uses a

controlled-flood technique to dynamically determine whether it should rebroadcast a

flooded message based upon the present state" recited in column 5 lines 46-59);

regarding claim 4, wherein the data packet includes at least one of Internet protocol

addresses of neighboring nodes, relay nodes, link status, and relay node sequence

numbers (Fig. 17, processing a probe-request or probe-reply message, see "unicast

message includes node identifier, a sequence number, a relay list" recited in column 28

lines 30-45); regarding claim 5, wherein the data packet includes at least one of Internet

protocol addresses of neighboring nodes, relay nodes, link status, and relay node

sequence numbers (Fig. 15, CFM technique by which a CFM node processes a

controlled flood message, see "update the receiving CFM node link cache using relay

list information contained in received message" recited in column 24 lines 57-65);

regarding claim 6, a system for reliably broadcasting a data packet under an ad-hoc

network environment, the system comprising (Fig. 1, controlled flood multicast network

nodes in ad-hoc network environment, see "ad-hoc network capable of efficiently routing

both multicast and unicast traffic" recited in column 2 lines 59-66), a determining unit

operable to determine whether or not at least one node that receives the data packet is

a relay node which transmits the received data packet to other neighboring nodes (Fig.

13, technique by which node determines whether to transmit data to neighbors" recited

in column 23 lines 1-20); a comparing unit operable to compare a first relay node

sequence number with a second relay node sequence number the first relay node

sequence number being contained in a management packet which is received by at

least one node that transmits a the data packet, the second relay node sequence

number being stored in a neighbor table of the at least one node that transmits the data

packet (Fig. 18, technique for forwarding CFM unicast message, see "comparing the

sequence number and node identifier against the stored list" recited in column 29 lines

26-32 and column 14 lines 11-22) and a control unit operable to determine whether or

not the data packet is retransmitted by the at least one node that transmits the data

packet according to a result of the comparison (Fig. 2B, a typical CFM communication

node, see " the node uses a controlled-flood technique to dynamically determine

whether it should rebroadcast a flooded message based upon the present state" recited

in column 5 lines 46-59); regarding claim 9, wherein the data packet includes at least

one of Internet protocol addresses of neighboring nodes, relay nodes, link status, and

relay node sequence numbers (Fig. 17, processing a probe-request or probe-reply

message, see "unicast message includes node identifier, a sequence number, a relay

list" recited in column 28 lines 30-45); regarding claim 10, (Fig. 15, CFM technique by

which a CFM node processes a controlled flood message, see "update the receiving

CFM node link cache using relay list information contained in received message" recited

in column 24 lines 57-65); regarding claim 11, a method for reliably broadcasting a data

packet under an ad-hoc network environment, the method comprising (Fig. 1, controlled

flood multicast network nodes in ad-hoc network environment, see "ad-hoc network

capable of efficiently routing both multicast and unicast traffic" recited in column 2 lines

59-66), broadcasting the data packet to neighboring nodes (Fig. 13, technique by which

node determines whether to transmit data to neighbors" recited in column 23 lines 1-

20), comparing a first relay node sequence number with a second relay node sequence

number the first relay node sequence number being contained in a management packet

received from the neighboring nodes the second relay node sequence number being

stored in a neighbor table of a node broadcasting the data packet (Fig. 18, technique for

forwarding CFM unicast message, see "comparing the sequence number and node

identifier against the stored list" recited in column 29 lines 26-32 and column 14 lines

11-22) and determining whether or not the data packet is retransmitted to the

neighboring nodes according to a result of the comparison (Fig. 2B, a typical CFM

communication node, see "if the designated destination matches the identifier of the

receiving node, the message is forwarded" recited in column 29 lines 30-38); regarding

claim 13, wherein the step of comparing comprises receiving the management packet

from the neighboring nodes (Fig. 18, technique for forwarding CFM unicast message,

see "when a node receives a unicast message" recited in column 29 lines 26-27) and

comparing the first relay node sequence number contained in a received management

packet with a second relay node sequence number stored in a neighbor table of the

node broadcasting the data packet (Fig. 18, technique for forwarding CFM unicast

message, see "comparing the sequence number and node identifier against the stored

list" recited in column 29 lines 26-32 and column 14 lines 11-22); regarding claim 17,

wherein the data packet includes at least one of Internet protocol addresses of

neighboring nodes, relay nodes, link status, and relay node sequence numbers (Fig. 17,

processing a probe-request or probe-reply message, see "unicast message includes

node identifier, a sequence number, a relay list" recited in column 28 lines 30-45);

regarding claim 18, wherein the neighbor table is updated on the basis of information of

the management packet each of the predetermined number of times (Fig. 15, CFM

technique by which a CFM node processes a controlled flood message, see "update the

receiving CFM node link cache using relay list information contained in received

message" recited in column 24 lines 57-65); regarding claim 19, a method for reliably

broadcasting a data packet under an ad-hoc network environment, the method

comprising (Fig. 1, controlled flood multicast network nodes in ad-hoc network

environment, see "ad-hoc network capable of efficiently routing both multicast and

unicast traffic" recited in column 2 lines 59-66), checking whether at least one node

operable to receive the data packet is a relay node, as a result of checking, when the

node is a relay node, broadcasting the data packet to neighboring nodes (Fig. 13,

technique by which node determines whether to transmit data to neighbors" recited in

column 23 lines 1-20), comparing a first relay node sequence number with a second

relay node sequence number the first relay node sequence number being contained in a

management packet which each of the neighboring nodes transmits the second relay

node sequence number being stored in a neighbor table of the at least one node (Fig.

18, technique for forwarding CFM unicast message, see "comparing the sequence

number and node identifier against the stored list" recited in column 29 lines 26-32 and

column 14 lines 11-22) and determining whether or not the data packet is retransmitted

to the neighboring nodes according to a result of the comparison (Fig. 2B, a typical CFM

communication node, see "if the designated destination matches the identifier of the

receiving node, the message is forwarded" recited in column 29 lines 30-38); regarding

claim 21, wherein the step of comparing comprises receiving the management packet

from the neighboring nodes (Fig. 18, technique for forwarding CFM unicast message,

see "when a node receives a unicast message" recited in column 29 lines 26-27) and

comparing the first relay node sequence number contained in a received management

packet with a second relay node sequence number stored in a neighbor table of the at

least one node (Fig. 18, technique for forwarding CFM unicast message, see

"comparing the sequence number and node identifier against the stored list" recited in

column 29 lines 26-32 and column 14 lines 11-22); regarding claim 25, wherein the data

packet includes at least one of Internet protocol addresses of the neighboring nodes,

relay nodes, link status, and relay node sequence numbers (Fig. 17, processing a

probe-request or probe-reply message, see "unicast message includes node identifier, a

sequence number, a relay list" recited in column 28 lines 30-45); regarding claim 26,

wherein the neighbor table is updated on the basis of information of the management

packet each of the predetermined number of times (Fig. 15, CFM technique by which a

CFM node processes a controlled flood message, see "update the receiving CFM node

link cache using relay list information contained in received message" recited in column

24 lines 57-65); regarding claim 27, further comprising the step of; as a result of

checking, when the node is not the relay node, storing information of the received data

packet in the neighbor table (Fig 18A, technique for forwarding CFM unicast message,

see "message is copied and stored step 424" recited in column 28 lines 59-67) and

regarding claim 28, wherein the management packet is transmitted by a node which

receives the data packet transmitted by the at least one node (Fig. 18, technique for

forwarding CFM unicast message, see "comparing the message sequence number and

originating node identifier and the forward the message" recited in column 29 lines

30-33).

### Claim Rejections - 35 USC § 103

1.      The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

2.      The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148

USPQ 459 (1966), that are applied for establishing a background for determining

obviousness under 35 U.S.C. 103(a) are summarized as follows:

1.      Determining the scope and contents of the prior art.
2.      Ascertaining the differences between the prior art and the claims at issue.
3.      Resolving the level of ordinary skill in the pertinent art.

    4.      Considering objective evidence present in the application indicating obviousness or nonobviousness.

3.     This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4.     Claims 2, 7, 12 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Liu et al. (USP 7,184,421 B1) in view of Ogier (USP 7,031,288 B2).


    Liu et al. discloses the claimed limitations as described in paragraph 3 above. Liu et al. does not disclose the following features: regarding claim 2, wherein the control unit transmits the data packet, wherein after adding "1" to the second relay node sequence number and the resulting sequence number is included in the data packet; regarding claim 7, wherein the control unit transmits the data packet, wherein after adding "1" to the second relay node sequence number and the resulting sequence number is included in the data packet; regarding claim 12, wherein the step of broadcasting comprises adding "1" to the second relay node sequence number which is stored in the neighbor table of each of the neighboring nodes, adding the resulting relay node sequence number and predetermined information to the data packet,  storing

information of the data packet in the neighbor table  and broadcasting the data packet to

the neighboring nodes and regarding claim 20, wherein the step of broadcasting

comprises adding "1" to the second relay node sequence number which is stored in the

neighbor table of each of the neighboring nodes adding the resulting relay node

sequence number and predetermined information to the data packet storing information

of the data packet in the neighbor table and broadcasting the data packet to the

neighboring nodes.

Ogier discloses a communication system for discovering new neighbor nodes

and detecting the loss of existing neighbor nodes with the following features: regarding

claim 2, wherein the control unit transmits the data packet, wherein after adding "1" to

the second relay node sequence number (Fig. 1, mobile internet working system, see

"sequence number is incremented each time a new broadcast packet is transmitted"

recited in column 15 lines 39-41) and the resulting sequence number is included in the

data packet (Fig. 1, mobile internet working system, see "include the broadcast

sequence number to allow neighbor nodes to process the update message" recited in

column 15 lines 52-60); regarding claim 7, wherein the control unit transmits the data

packet, wherein after adding "1" to the second relay node sequence number (Fig. 1,

mobile internet working system, see "sequence number is incremented each time a new

broadcast packet is transmitted" recited in column 15 lines 39-41), the resulting

sequence number is included in the data packet (Fig. 1, mobile internet working system,

see "include the broadcast sequence number to allow neighbor nodes to process the

update message" recited in column 15 lines 52-60); regarding claim 12, wherein the

step of broadcasting comprises adding "1" to the second relay node sequence number

which is stored in the neighbor table of each of the neighboring nodes (Fig. 1, mobile

internet working system, see "sequence number is incremented each time a new

broadcast packet is transmitted" recited in column 15 lines 39-41), adding the resulting

relay node sequence number and predetermined information to the data packet (Fig. 1,

mobile internet working system, see "include the broadcast sequence number to allow

neighbor nodes to process the update message" recited in column 15 lines 52-60),

storing information of the data packet in the neighbor table (Fig. 1, mobile internet

working system, see "neighbor table stores state information of neighbor node" recited

in column 27 lines 59-61) and broadcasting the data packet to the neighboring nodes

(Fig. 1, mobile internet working system, see "broadcast update messages to

neighboring nodes" recited in column 15 lines 35-39) and regarding claim 20, wherein

the step of broadcasting comprises adding "1" to the second relay node sequence

number which is stored in the neighbor table of each of the neighboring nodes (Fig. 1,

mobile internet working system, see "sequence number is incremented each time a new

broadcast packet is transmitted" recited in column 15 lines 39-41), adding the resulting

relay node sequence number and predetermined information to the data packet (Fig. 1,

mobile internet working system, see "include the broadcast sequence number to allow

neighbor nodes to process the update message" recited in column 15 lines 52-60),

storing information of the data packet in the neighbor table (Fig. 1, mobile internet

working system, see "neighbor table stores state information of neighbor node" recited

in column 27 lines 59-61) and broadcasting the data packet to the neighboring nodes

(Fig. 1, mobile internet working system, see "broadcast update messages to

neighboring nodes" recited in column 15 lines 35-39).

It would have been obvious to one of the ordinary skills in the art at the

time of invention to modify the system of Liu et al. by using the features, as taught by

Ogier, in order to provide the function of a control unit transmitting the data packet after

adding "1" to the second relay node sequence number and including the resulting

sequence number in the data packet and storing information of the data packet in the

neighbor table. The motivation of using this function is to enhance the system

functionalities in a cost effective manner.


5.      Claims 3 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Liu et al (USP 7,184,421 B1) in view of Rhee (US 2003/0099221 A1).


Liu et al. discloses the claimed limitations as described in paragraph 3 above. Liu

et al. does not disclose the following features: regarding claim 3, further comprising a

memory unit which includes the neighbor table drafted on the basis of information of the

management packet received by the at least one node and regarding claim 8, further

comprising a memory unit which includes the neighbor table drafted on the basis of

information of the management packet received by the at least one node that transmits

the data packet.

Rhee et al. discloses a network protocol for use with ad-hoc wireless network

with the following features: regarding claim 3, further comprising a memory unit which

includes the neighbor table drafted on the basis of information of the management

packet transmitted from the at least one node (Fig. 1, the wireless network where the

protocol may be implemented, see "repeater stores a pointer in memory for identifying

the neighbor nodes" recited in paragraph 0052 lines 1-9)  and regarding claim 8, further

comprising a memory unit which includes the neighbor table drafted on the basis of

information of the management packet received by the at least one node that transmits

the data packet (Fig. 1, the wireless network where the protocol may be implemented,

see "repeater stores a pointer in memory for identifying the neighbor nodes" recited in

paragraph 0052 lines 1-9).

It would have been obvious to one of the ordinary skills in the art at the time of

invention to modify the system of Liu et al. by using the features, as taught by Rhee, in

order to provide a memory unit which includes the neighbor table drafted on the basis of

information of the management packet transmitted from the at least one node. The

motivation of using the memory unit is to enhance the system functionalities in a cost

effective manner.

6.      Claims 14, 16, 22 and 24 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Liu et al (USP 7,184,421 B1) in view of Riihinen et al. (USP

6,697,331 B1).

Liu et al. discloses the claimed limitations as described in paragraph 3 above. Liu et al. also discloses the following features: regarding claim 16, wherein, when the first and second relay node sequence numbers are not equal, the neighbor table is updated with a relatively large relay node sequence number (Fig. 3, CFM technique for beacon transmission, see "if cluster-head is identified with a greater number of cluster-head, table is updated" recited in column 17 lines 22-37) and regarding claim 24, wherein, when the first and second relay node sequence numbers are not equal, the neighbor table is updated with a relatively large relay node sequence number (Fig. 3, CFM technique for beacon transmission, see "if cluster-head is identified with a greater number of cluster-head, table is updated" recited in column 17 lines 22-37).

Liu et al. does not disclose the following features: regarding claim 14, wherein the step of determining comprises: as a result of the comparison, when the first and second relay node sequence numbers are equal, terminating transmission of the data packet; and when the first and second relay node sequence numbers are not equal to each other, retransmitting the data packet to the neighboring nodes and regarding claim 22, wherein the step of determining comprises: as a result of the comparison, when the first and second relay node sequence numbers are equal, terminating transmission of the data packet; and when the first and second relay node sequence numbers are not equal, retransmitting the data packet to the neighboring nodes.

Riihinen et al. discloses cellular communications for link layer acknowledgement and retransmission with the following features: regarding claim 14, wherein the step of determining comprises: as a result of the comparison, when the first and second relay

node sequence numbers are equal, terminating transmission of the data packet (Fig. 8,

poll timer start, restart and cancel conditions, see "if sequence number is greater than or

equal to poll timer cancels and retransmission stops" recited in column 4 lines 9-15 and

column 11 lines 17-33 and 25-26) and when the first and second relay node sequence

numbers are not equal to each other, retransmitting the data packet to the neighboring

nodes (Fig. 8, poll timer start, restart and cancel conditions, see "if sequence number is

greater then poll timer starts for retransmission" recited in column 4 lines 9-15 and

column 11 lines 17-33) and regarding claim 22, wherein the step of determining

comprises: as a result of the comparison, when the first and second relay node

sequence numbers are equal, terminating transmission of the data packet (Fig. 8, poll

timer start, restart and cancel conditions, see "if sequence number is greater than or

equal to poll timer cancels and retransmission stops" recited in column 4 lines 9-15 and

column 11 lines 17-33 and 25-26) and when the first and second relay node sequence

numbers are not equal, retransmitting the data packet to the neighboring nodes (Fig. 8,

poll timer start, restart and cancel conditions, see "if sequence number is greater then

poll timer starts for retransmission" recited in column 4 lines 9-15 and column 11 lines

17-33).

It would have been obvious to one of the ordinary skills in the art at the time of

invention to modify the system of Liu et al. by using the features, as taught by Riihinen

et al., in order to provide function of comparison so that when the first and second relay

node sequence numbers are equal, terminating transmission of the data packet and

when the first and second relay node sequence numbers are not equal to each other,

retransmitting the data packet to the neighboring nodes. The motivation of using the

function of comparison is to enhance the system functionalities in a cost effective

manner.


7.      Claims 15 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Liu et al (USP 7,184,421 B1) in view of Riihinen et al. (USP 6,697,331 B1) as

applied to claim11, 14, 19 and 22 above, and further in view of Zhu et al. (USP

5,768,527).


        Liu et al. and Riihinen et al. describe the claimed limitations as discussed in

paragraph 3 and 9 above. Liu et al. and Riihinen et al. do not disclose the following

features: regarding claim 15, wherein a number of times for retransmitting the data

packet is set to a predetermined number of times, and when the number of times the

data packet has been retransmitted exceeds the set number of times, retransmitting the

data packet is stopped and regarding claim 23, wherein retransmission of the data

packet is set to occur a predetermined number of times, and when the number of times

the data packet is retransmitted exceeds the set number of times, retransmitting the

data packet is stopped.

        Zhu et al. discloses a communication system for real time multimedia streaming

with the following features: regarding claim 15, wherein a number of times for

retransmitting the data packet is set to a predetermined number of times, and when the

number of times the data packet has been retransmitted exceeds the set number of

times, retransmitting the data packet is stopped (Fig. 3, multimedia streaming system,

see "retransmission message includes number of copies for retransmission and for

each retransmission request sent out a timer is started" recited in column 7 lines 50-59)

and regarding claim 23, wherein retransmission of the data packet is set to occur a

predetermined number of times, and when the number of times the data packet is

retransmitted exceeds the set number of times, retransmitting the data packet is

stopped (Fig. 3, multimedia streaming system, see "retransmission message includes

number of copies for retransmission and for each retransmission request sent out a

timer is started" recited in column 7 lines 50-59).

It would have been obvious to one of the ordinary skill in the art at the time of

invention to modify the system of Liu et al. with Riihinen et al. by using the features, as

taught by Zhu et al., in order to provide the function wherein a number of times for

retransmitting the data packet is set to a predetermined number of times, and when the

number of times the data packet has been retransmitted exceeds the set number of

times, retransmitting the data packet is stopped and regarding.  The motivation of using

the function of comparison is to enhance the system functionalities in a cost effective

manner.

### Response to Arguments

8.      Applicant's arguments filed April 29th, 2008 have been fully considered but they

are not persuasive. Applicant in the remarks states regarding claim 1, "Lui merely

discloses that the receiving node may transmit a received unicast message, but does

not teach or suggest retransmission the received unicast message once it has already

been forwarded". Examiner respectfully disagrees. Lui teaches the retransmission the

received message (Fig. 2B, a typical CFM communication node, see "the node uses a

controlled-flood technique to dynamically determine whether it should rebroadcast a

flooded message based upon the present state" recited in column 5 lines 46-59).


### *Conclusion*

9.      **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time

policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action.  In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action.  In no event, however, will the statutory period for reply expire later

than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to SYED BOKHARI whose telephone number is (571)270-

3115.  The examiner can normally be reached on Monday through Friday 8:00-17:00

Hrs..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kwang B. Yao can be reached on (571) 272-3182. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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